

Applicant(s): Allan Scherr
Serial No.: 10/036,547
Filed: December 31, 2001

E30-050CON2 (96-031CON2)

REMARKS

This application has been examined with claims 18 through 32. Claim 19 and 29 are canceled. Claims 18, 20, 21 and 30 through 32 are amended. Claims 18, 20 through 28 and 30 through 32 remain in the application.

Applicant requests reconsideration and reexamination of the above-identified application in view of the amendments made to the specification and claims. The following remarks state Applicant's bases for making this request and are organized according to the Examiner's Action by paragraph number.

Examiner's Action, Paragraph 2

The Examiner objects to the drawings. An attached Amendment to the Drawings should overcome these objections. The reference to FIG. 2c has been changed to 2a.

Examiner's Action, Paragraph 3

The Examiner objects to the drawings because the monitoring means of claims 20, 21, 31 and 32 as well as "means responsive to messages of" in claim 29 are not shown. Applicant has changed "monitoring means" in claims 20, 21, 31 and 32 to "monitor" that is shown in FIG. 1c. Claim 29 is canceled.

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Examiner's Action, Paragraph 4

Applicant has reviewed the specification and particularly the Examiner's objections. Applicant is amending the specification to include all those Examiner's suggestions with the following exceptions:

1. Applicant has amended the paragraph beginning at page 12, line 4 to more clearly state the various relationships. Applicant believes that the phrase "that acts as a cache memory device 14" in the amended paragraph beginning at page 12, line 4 is appropriate language and does not constitute new matter. The specification defines a cache management system as a control device plus storage units. The claim defines these components in the alternative language of a cache memory device and a cache memory manager. The language beginning at page 12, line 4 provides an antecedent basis in the specification for this alternate language. Applicant sees nothing in this alternative language that constitutes new matter.
2. With respect to the change at page 13, line 12, Applicant believes that the revised language is clearer than originally filed but it is grammatically

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the same and therefore does not raise any question of new matter.

3. With respect to page 20, line 6, Applicant believes that the change to the paragraph more clearly identifies a configurator as including step 26 for performing the monitoring of a data request at the data node. The paragraph beginning at page 17, line 10 is further amended to indicate that the methods shown in that paragraph are, in fact, examples of the monitoring operations.
4. With respect to the claims, Applicant has amended claims 20 and 32. Claim 29 is canceled.

Examiner's Action, Paragraph 5

The Examiner rejects claims 18 through 32 under 35 U.S.C. §112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as his invention. With respect to claim 18, it is Applicant's intent to claim a single data node. The preamble is modified to place the data node in a network. However, Applicant believes that the amended language is clearly directed to a data node for use in a data network and

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that data node includes a cache memory device and a cache memory manager incorporated in the various functions of each cache management system at each data node.

Applicant believes that with this modification there are proper antecedent bases for phrases such as "said data node". With respect to the cache memory control of transfers, Applicant believes that the amendment clarifies the process by which the cache memory manager selects one of the cache memory management methods for controlling the transfers with the control network communications at the data node.

The Examiner's rejections of claim 19 are moot because claim 19 has been canceled. Claims 20 and 21 are amended to depend from claim 18 and to incorporate the Examiner's suggested changes. Further Applicant believes that there now is an antecedent basis for "monitoring" means in claims 20 and 21.

The Examiner asserts the claims 29 through 32 are unclear for reasons analogous to the rationale for his argument that claims 19 through 21 are unclear. Claim 29 is deleted. Claims 30 through 32 are modified to be consistent with claims 19 through 21.

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Examiner's Action, Paragraphs 6 and 7

The Examiner rejects claims 18, 19 and 29 under 35 U.S.C. §102(b) as being anticipated by the previously identified Willick and Korner references each taken separately. In view of the amendment to claim 18 and the subsequent cancellation of claims 19 and 29, Applicant respectfully traverses the Examiner's rejection.

Applicant respectfully submits that neither the Korner reference nor the Willick reference discloses Applicant's invention particularly as set forth in claim 18. As Applicant understands the Korner reference, each data node would operate with the same caching algorithm. That is in each data node memory would be partitioned by process to handle different types of transfers differently. For example, the Korner reference describes the use of an MRU replacement algorithm for service requests included in inode, directory block, executable block and sequentially access file block categories. The LRU replacement algorithm is used for randomly accessed file blocks. File blocks that are only accessed once are not cached. Directory information is placed in either a process partition or system partition. This is the configuration of "The Intelligent Algorithm" that Korner reference describes.

Applicant believes that this reference merely suggests the use of this particular intelligent algorithm in each and every

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data node in a data network as a solution. While the Intelligent Algorithm handles different requests according to differently replacement algorithms, there is no difference at the global or data node level.

Claim 18 defines a structure in which the claimed data node comprises a cache memory device and a cache memory manager. The cache memory manager selects a cache memory method to control network communications at the data node. The claim further indicates that the cache memory methods used at different data nodes can be different. Thus Applicant submits that claim 18 defines a data node for use in a network in which the replacement algorithm can be switched at a global level so that different data nodes in the data network can operate with different cache memory management methods simultaneously.

The Willick reference presents an analysis of different ways to make data available in a cache memory recognizing a universal use of the LRU replacement algorithm. This article then looks at the different replacement algorithms in view of different operating environments. The conclusion is that the FBR replacement algorithm is the preferred replacement algorithm. As Applicant understands it, the Willick reference, would propose that all data nodes in a data network operate with the FBR replacement algorithm. Applicant sees nothing in the Willick reference that suggests the ability to change the

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algorithm dynamically so sees nothing that corresponds to the claimed cache memory manager. Applicant at most sees the Willick reference as disclosing or suggesting a study of a predicted use and then operating a data node with that use, but no other.

Claim 18, as amended, defines a data node for use in a data network that has a plurality of interconnected nodes wherein the data node has a cache memory device and a cache memory manager. The cache memory device stores at least two different cache memory management methods for controlling the method by which the data node communicates with other data nodes in the data network. The cache memory manager can respond to a number of inputs to select one of the cache memory management methods in the cache memory device under which the data node thereafter operates in communications with other data nodes in the data network. Applicant respectfully submits that neither the Korner reference nor the Willick reference disclose any such structure. Moreover, Applicant respectfully submits that neither the Korner reference nor the Willick reference suggest this specific structure.

With respect to the other rejections under 35 U.S.C. §102, Applicant has incorporated the structure of claim 19 so that original claims 19 and 29 are redundant. They are therefore canceled.

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Examiner's Action, Paragraph 8

The Examiner indicates that claims 20 through 28 and 30 through 32 would be allowable if rewritten to overcome the various rejections and objections set forth in the office action including all the limitations of the base claim and any intervening claims. Applicant respectfully submits that the amendments to claim 18 make it, as a sole parent claim, patentable over the prior art and therefore has left claims 20 through 28 and 30 through 32 as depending claims.

Summary

Applicant has amended the drawings, specification and claims. Applicant respectfully submits that claim 18 defines a structure that is novel and that would not have been obvious to a person of ordinary skill in the art at the time the Applicant made his invention. Applicant believes that with claim 18 being allowable, Applicant respectfully submits that claims 20 through 28 and 30 through 32 are also allowable and requests the Examiner to pass this application to issue.

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If there are any questions, we urge the Examiner to call
us collect.

Respectfully Submitted,

A handwritten signature in cursive script, appearing to read "George A. Herbster".

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